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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/781,917      | 02/20/2004  | Tohru Horio          | 248233US2           | 5308             |

22850 7590 04/19/2007  
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

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| EXAMINER |
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MCCULLOUGH, MICHAEL C

|          |              |
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| ART UNIT | PAPER NUMBER |
|----------|--------------|

3653

| SHORTENED STATUTORY PERIOD OF RESPONSE | NOTIFICATION DATE | DELIVERY MODE |
|--|-------------------|---------------|
| 3 MONTHS                               | 04/19/2007        | ELECTRONIC    |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/19/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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oblonpat@oblon.com  
jgardner@oblon.com

|                              |  |                                     |  |
|------------------------------|--|-------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/781,917     | <b>Applicant(s)</b><br>HORIO, TOHRU |  |
|                              | <b>Examiner</b><br>Michael C. McCullough | <b>Art Unit</b><br>3653             |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 2, 6-11, 16, 20-25, 31, and 34-39 are objected to under 37 C.F.R. 1.75(i).
2. Claim 1 is objected to because of the following informalities: grammatical error "the another sheet", line 8.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 7, 21, and 35 recite the limitation "the second sheet detecting device" in lines 9, 10, and 10. There is insufficient antecedent basis for this limitation in the claim. For the purpose of expediting prosecution, the claim will be examined in the remainder of this action as if it read "the second detecting device".
4. Claims 43-45 appear to be written to invoke 35 USC 112 6<sup>th</sup> paragraph. However, the applicant has not formally invoked 35 USC 112 6<sup>th</sup> paragraph. Therefore, the examiner has construed the claims as not-invoking 35 USC 112 6<sup>th</sup> paragraph. If the applicant wishes to invoke 35 USC 112 6<sup>th</sup> paragraph, please make a formal statement and identify the corresponding structure in the specification for each means plus function citation.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3653

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Byeon et al. (US 6,381,441 B1) in view of Hirota et al. (US 6,206,359 B1). Byeon et al. discloses an image reading/forming device (see column 1 lines 21-22), a pick-up device (see Figure 1 elements 55, 56, 57), a drive device that is a pulse motor (see column 8 lines 7-18), at least one detecting device (see Figure 2 elements 91-95), a control device (see Figure 2 element 100), a display device (see Figure 4 S222), and a drive amount that comprises a drive time (see column 7 lines 14-19).

Regarding claims 1, 3, 6, 15, 17, 20, 29, 31, and 34 control logic, see column 8 lines 7-44.

Regarding claims 2, 16, and 30 control logic, see column 7 lines 14-19 and column 8 lines 45-54.

Regarding claims 7, 21, and 35 control logic, see column 3 lines 36-43.

Regarding claims 10, 11, 24, 25, 38, and 39 control logic, see column 7 lines 27-39 and column 3 lines 19-35.

Byeon et al. does not disclose a separating device comprising a rotary member and an obstructing member.

However, Hirota et al. discloses a similar device that includes a separating device comprising a rotary member (see Figure 1 element 16) and an obstructing member (see column 3 lines 57-58) for the purpose of separating documents one by one (see column 3 lines 56-58). It would have been obvious for a person of ordinary skill

Art Unit: 3653

in the art at the time of the applicant's invention to modify Byeon et al. by utilizing a separating device comprising a rotary member and an obstructing member, as disclosed by Hirota et al., for the purpose of separating documents one by one.

***Response to Arguments***

6. Applicant's arguments with respect to claims 1-45 have been considered but are moot in view of the new ground(s) of rejection.

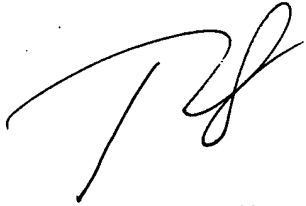
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. McCullough whose telephone number is (571) 272-7805. The examiner can normally be reached on Monday-Friday, 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MCM



PATRICK MACKEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600